## **QUALITY ASSURANCE SURVEILLANCE PLAN**

## **Performance Requirements**

The requirements contained in this task order are considered performance-based, focusing on the Agency's desired results and outcomes. The contractor shall be responsible for determining the most effective means by which these requirements will be fulfilled. In order to fulfill the requirements, the contractor shall design innovative processes and systems that can deliver the required services in a manner that will best meet the Agency's performance objectives. This performance-based requirement represents a challenge to the contractor to develop and apply innovative and efficient approaches for achieving results and meeting or exceeding the performance objectives, measures, and standards described below. The Contractor's performance will be reflected in the positive or negative evaluation offered by the Agency in the Contractor Performance Evaluation (CPE) which is evaluated annually (per the "Contractor Performance Evaluation" clause in the contract). The Task Order Manager shall submit a complete annual review of the areas outlined in the Quality Assurance Surveillance Plan (QASP), included in the contract, which will then be utilized by the Project Officer in preparing the overall evaluations submitted annually in response to the Contractor Performance Evaluation requirements in the contract.

Task	Activities	Deliverables	Performance Requirement
Task 1: Develop QAPP	Develop QAPP outlining the approaches to be implemented ensuring a high standard of quality in secondary data, data analysis, and written deliverables.	Draft QAPP Revised QAPP	Management and Communications Technical Effort Timeliness
Task 2: Secondary Data Aggregation	LID BMP performance data will be identified and collected for the BMP model validation study.	Annotated Bibliography	Cost Management and Control Technical Effort Timeliness

Task	Activities	Deliverables	Performance Requirement
Task 3: Database Design and Development	Database tables and queries shall be designed for data organization and retrieval	Draft Database design Revised Database Design	Management and Communications Technical Effort Timeliness
	The validation data shall be entered into the database.	Populated Database	Technical Effort Timeliness
Task 4: Model Development and Evaluation	Models representing the LID configurations used in the datasets identified in Task 2 shall be developed in SWMM 5.	SWMM 5 input files for each LID configuration.	Technical Effort Timeliness
	A model performance evaluation will be conducted to identify systemic model errors or other deficiencies in the ability of SWMM5 to reasonably match observed LID performance.	Draft report evaluating model performance results	Management and Communications Technical Effort Timeliness
Task 5: Project Wrap-Up and Final Report	A final report describing the work done under this project shall be prepared.	Draft Final Report  Revised Final  Report	Technical Effort Timeliness

General Management and Administration							
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentive				
Management and Communications: The Contractor shall maintain contact with the EPA CO, PO and TOM throughout the performance of the contract and shall immediately bring potential problems to the attention of the appropriate EPA TOM. In cases where issues have a direct impact on project schedules or cost, the contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	Any issues that impact project schedules or cost shall be brought to the attention of the appropriate EPA TOM within 3 business days of occurrence.	100% of active work assignments under the contract will be reviewed by the EPA TOM monthly (via monthly progress report) to identify unreported issues. The EPA TOM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	Unsatisfactory rating under the category of Business Relations in the NIH Performance Evaluation System if two or more incidents occur during an applicable period of performance when the contractor does not meet the measurable performance standards for a given contract period.				

STREAMS 2
Validation of Stormwater Management LID BMP Models

General Management and Administration						
Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentive s			
Timeliness: Services and deliverables shall be in accordance with schedules stated in each work assignment or tasking document, unless amended or modified by an approved EPA action.	During any period of performance, 90% of all submitted deliverables shall be submitted no later than 5 business days past the due date.	100% of active work assignments under the contract will be reviewed by the EPA TOM monthly (via monthly progress report & milestones established for each deliverable) to compare actual delivery dates against those approved. The EPA TOM will report any issues to the EPA PO who will bring the issue(s) to the Contractor's attention through the CO.	Unsatisfactory rating under the category of Timeliness in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.			

## STREAMS 2 Validation of Stormwater Management LID BMP Models

Cost Management and
Control: The
Contractor shall
monitor, track and
accurately report level
of effort, labor cost,
other direct cost and
fee expenditures to EPA
through progress
reports and approved
special reporting
requirements.

The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate time keeping.

The contractor shall manage costs to the level of approved ceiling on the work assignment. The contractor shall notify the TOM/PO when 75% of the approved funding ceiling for the work assignment is reached.

The EPA PO will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment expenditures. The EPA PO shall review the Contractor's monthly progress reports and request the TOMs verification of expenditures and technical progress before authorizing invoice payments.

Unsatisfactory rating under the category of Cost Control in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance.

STREAMS 2
Validation of Stormwater Management LID BMP Models

**Technical Effort:** The analyses or products developed by the contractor shall be factual and defensible and based on sound science and engineering. All data shall be collected from reputable sources and quality assurance measures shall be conducted in accordance with contract, agency requirements and any additional requirements outlined in individual work assignments or technical directives. Any work requiring the contractor to provide options or recommendations shall include the rationale used in selecting the option/recommendatio n and all other options and recommendations considered.

All analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. All analyses and products (initial and final drafts) shall conform in format and content to requirements specified by the TOM in written technical direction, and should meet the objectives stated in the work assignment. All initial draft documents shall be clearly written at a level appropriate to the targeted audience. All information shall be factual, technically sound, and accurate, with data sources identified.

Draft versions of a document shall require no more than two editorial revisions.

EPA will review all analyses and work products conducted by the Contractor and will independently consider the merit. EPA may opt to peer review analyses to further validate merit.

The EPA TOM will review initial drafts to assess technical accuracy and editorial quality. The TOM will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents.

Unsatisfactory rating under the category of QUALITY OF PRODUCT OR SERVICE in the NIH Performance Evaluation System when the contractor does not meet the measurable performance standards during an applicable period of performance, even after review input and follow up discussion by Agency personnel.